Migration Weekend Playbook

for T2 Participants

Migration Weekend Dress Rehearsal

1 to 5 February 2023

T2-T2S Consolidation   26-01-2023

V1.0 Final

Version Control

Version	Date	Author	Distribution	Explanation
0.1	18-12-2022	ECB	DG for Migration	First version shared with DG for Migration
0.2	20-12-2022	ECB	CB Migration Managers	Version shared with Central Banks Migration Managers
0.3	21-12-2022	ECB	T2 Participants	Working document distributed by CBs to their communities
0.4	06-01-2023	ECB	CB Migration Managers	Added conditions for sending payments on Sunday 5/2 in section 6.2
				Added clarification on testing restriction in section 7.1
				Updated interest rates reflecting Production
				Added information on the BD schedule after the completion of the Migration Weekend in section 7.5
				Added information on the pre-migration validation test in section 6.1
1.0	26-01-2023	ECB	T2 Participants	Version for distribution to the T2 Participants.

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1   Introduction

This Migration Weekend Playbook for the Migration Weekend Dress Rehearsal (MWDR) starting on 3 February 2023 is an extract of the Migration Weekend Playbook for Production. The document provides a list of conditions specific to the MWDR and the T2 participants (T2P), pre-requisites, information on timings and descriptions of the activities.

2   Objective

The objective of this Migration Weekend Playbook is to deliver a list of activities which are planned for the 3-5 February 2023 MWDR. The content of the document is targeted at the Central Banks (CB) and their T2Ps. It aims to support these stakeholders in their preparation for the MWDR and the Go-Live of T2-T2S Consolidation. The focus of this document will be on T2P activities.

3   Scope

In-scope

- Conditions specific to the MWDR
- Pre-requisites
- Timings
- Activities for T2Ps
- Pre-Migration and Post-Migration validation activities

Out of scope

- Description of activities and checkpoints for the T2 Operator and Central Banks

4   Rehearsal Conditions

This MWDR differentiates itself from the Production conditions and other rehearsals on the following points:

- The disconnection of TARGET2-CUST from T2S/TIPS and the connection of these services with T2 are not included as this was performed in the July 2022 MWDR.
- Specific to this MWDR, the TARGET2-CUST balances (PM, SF and HAM) from the EOD 03/02/2023 are taken as input. T2Ps must ensure that the reconciliation is based on their closing balance of TARGET2-CUST 03/02 and take into account any possible marginal lending/overnight deposit established in TARGET2-CUST at end-of-day on the Friday (ref. activity T2.MW.T2P.BAL.REC)
- Users should refrain from attempting testing outside the scope of the MWDR activities in the duration of the MWDR (access, operations and support is restricted in this period).
- T2Ps shall not perform any action in the T2 system before the CB has confirmed T2 is available for T2P planned activities
- The cut-off for CBs and T2Ps to capture standing orders is 01/02/2023 at 15:00 CET
- During the Pre-Migration validation period from 02/02/2023-03/02/2023 RTGS is closed, however, the A2A RTGS channel will remain open to allow the sending warehouse payments. The channel will only remain open during the indicated timeframe in table 1 below.

- CLM will have a closing day on 02/02/2023 and will be open 03/02/2023 however limited to MWDR activities.

The following conditions in Production will also apply in this MWDR.

- T2 and T2S will follow a dedicated schedule following the Migration Weekend activities and start of T2S Night-Time Settlement (NTS), e.g the settlement window for interbank and Customer Payments starts 05/02/2023 at 08:00 CET.
- TARGET2-CUST will follow the live timing schedule on Friday 03/02/2023.
- Migration activities will not be put on hold if certain activities were not completed timely by one or more participants/communities and if the following activities can be initiated without impacting the overall migration progress.
- The Minimum Reserve (MR) period and interest rates are as follows:
  - MR period from: (Wednesday inclusive): 01/02/2023
  - MR period to: (Tuesday inclusive): 07/02/2023
  - MRIR minimum reserve interest rate: 2,00%
  - MRP1 penalty rate type 1: 5,25%
  - MRP2 penalty rate type 2: 7,75%
  - EXIR excess reserve interest rate (exempt tier): 0%
  - ODIR overnight deposit interest rate: 2,00%
  - MLIR marginal lending interest rate: 2,75%
  - Excess reserve exemption factor: 0
- Calculation of the MR running average can start after the EoD process 06/02/2023 (BD 07/02/2023)
- T2Ps are responsible for the correct configuration of their reference data objects. To verify the configuration of Certificate DNs and PTAs, RTGS A2A users are highly recommended to perform the validation tests described in section 6. These validations tests are also foreseen for Production.

5   Pre-requisites for execution

The following activities must have been completed prior to start of the MWDR:
- The connection and reference data set up – All CBs and T2Ps have connected to T2 via ESMIG and completed their Pre-Migration activities in CRDM UTEST.
- CBs and T2Ps have connected their internal systems to ESMIG. This is already established for UTEST, but in Production this activity will occur during the Migration Weekend with the green light to start the Migration at 19:15 CET and prior to the Pre-Migration validation tests for some A2A RTGS Users.

6   Reference Data Validation

T2Ps that are A2A users can perform validation tests of their A2A configuration prior to the Migration Weekend and after the Migration Weekend. The former takes place from Thursday to Friday,

02/02/2023-03/02/2023 and the latter on Sunday, 05/02/2023. The exact timings are indicated in the table overview in section 7.4.

6.1 Pre-Migration Validation

T2Ps (limited to A2A RTGS users) can perform a validation test by sending pacs.009 warehoused payments with settlement date **08/02/2023** within the dedicated timeframe indicated in table 1 section 7.4 (once the inbound RTGS A2A channel is opened). Warehoused means that the payment orders are submitted with a future business day, meaning it must not be set to a past or invalid date.

In case the banks send payment orders with a settlement date lower or equal to the go-live date, all these payment orders will be rejected immediately as they are sent outside the allowed settlement timeframe → **E018**

Only **warehoused payments** including a settlement date later than the go-live date will go through the sender-account authorisation and are rejected with **E017.**

When the warehoused pacs.009 is sent, the following validations are conducted:

- Schema validations
- ISO-D validations
- Any message validations
- Sender account authorisation (i.e. the validations which take into account DN related information)

If the reference data was correctly configured and the validations passed, the submitter of the pacs.009 will receive a negative pacs.002 including **Error Code E017**. This code only indicates an error in the settlement date as the warehoused payments are expected to be rejected as settlement does not take place at this point of the BD.**Any identified errors different to E017[1] must be reported to the National Service Desk (NSD) on the same day of the test**. If the error is linked to an erroneous Certificate DN or PTA, the T2P must provide the appropriate form for LLI to its NSD to perform the necessary correction.

In order to ensure that the *sender account authorisation validations* are conducted, the users have to follow the approach outlined.

In case the A2A user submits payments for immediate settlement, these payments will be rejected without conducting the *sender account authorisation validations*.

Additional information

    I   Once the business day 06/02/2023 was triggered by the Business Day Management (BDM), all activities will take place during the relevant phases as it will be the case on any standard business day.

    I   This means that standing order execution for all standing orders valid on business day 06/02/2023 will be processed at the relevant event and valid AS related standing orders will be processed as configured.

       Note: In case the standing orders in RTGS are triggered at the relevant event before liquidity

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[1] Expected result with the correct configuration: *Settlement date greater than latest submission date for warehoused payments or not a valid business day >E017/*

has been made available on the RTGS DCA, these standing orders will settle with an amount of zero.

l   The sending of immediate LTs is possible during the appropriate phases of the business day 06/02/2023).

Note: A pacs.009 with code word SBTI is considered as liquidity transfer and is therefore directly processed/settled (if validated successfully) in business day phase RTS I (see RTGS UDFS for more details)

AS related information

AS can send an AS batch during the pre-migration validation period to check the general interaction with the system. However, such AS batch will be rejected with **E018** (i.e. pain.998 sent to the AS indicating that the AS batch was sent outside the allowed timeframe) and no sender-account authorisation checks are conducted.

The pre-migration validation tests are highly recommended for all A2A users, in particular CMPs that are A2A users in RTGS.

6.2   Migration Validation

Before releasing payment queues in their internal applications, T2Ps are invited to verify their configuration by instructing payments on Sunday, 05/02/2023 between 08:00 and 10:00 CET. T2Ps should only send payments of €0.01 to one or more counterparties with whom they have a bilateral agreement to send/receive payments.

In case of errors, the T2Ps should inform its NSD as early as possible. Corrections in CRDM will only take effect after the EoD process and consequent data propagation on Monday, 06/02/2023. Errors specific to the Certificate DN and PTA may exceptionally, and on a best effort basis, be corrected via last level intervention with intraday effect. The T2P must provide the appropriate form for LLI to its NSD to perform the necessary correction.

Note: RTS II opens Sunday 05/02/2023 08:00 CET with BD 06/02/2023 for both U2A and A2A users. It will however close Sunday between 10:00 and 12:00 CET and once reopened remain open until Monday 06/02/2023 15:15 CET. The validation window for A2A users to test their configuration is limited from 08:00 to 10:00 CET. Payment messages (not linked to validation tests) sent Sunday between 10:00 and 12:00 CET will be queued and processed once the system and channels are reopened at 12:00.

AS additional information

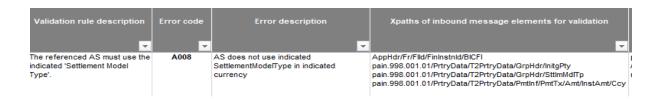Once the business day 06/02/2023 is triggered by BDM and the system is in the appropriate phase of the business day (i.e. RTS I) AS can send AS batches which are validated and (if valid) may settle immediately (final and irrevocable settlement in line with the Settlement Finality Directive (SFD). **AS are however advised not to send an AS batch that will settle**. To avoid this from happening, the

AS should enter a settlement procedure that is not registered by the AS causing the validation error A008. This validation is done AFTER the sender-account authorisation checks.

Note: it lies within the sole responsibility of the AS to create and submit such AS batch which is negatively validated (by entering an incorrect AS procedure). Valid AS batches will be settled during the allowed timeframe (i.e. RTS I). In case an AS do enter a settlement procedure that settles it must inform the impacted parties immediately.

An AS batch with a wrong business day would be rejected without conducting the sender account authorisation checks.

Validation rule description	Error code	Error description	Xpaths of inbound message elements for validation	
The referenced AS must use the indicated 'Settlement Model Type'.	A008	AS does not use indicated SettlementModelType in indicated currency	AppHdr/Fr/Flld/FinInstnId/BICFI pain.998.001.01/PrtryData/T2PrtryData/GrpHdr/InitgPty pain.998.001.01/PrtryData/T2PrtryData/GrpHdr/SttlmMdlTp pain.998.001.01/PrtryData/T2PrtryData/PmtInf/PmtTx/Amt/InstAmt/Ccy	

7 Pre-Migration Validation, Migration Weekend and Post-Migration Plan

7.1 Pre-Migration validation

Pre-Migration validation activities for T2Ps starts on Thursday 02/02/2023 and continue until Friday 03/02/2022. The exact timings are indicated in the table 1 (section 7.4) and the specifications of the test are described in section 6.1. T2Ps should note that testing will not be possible beyond the pre-migration validation activities from the start of EoD Wednesday 01/02/2023 due to the closure of RTGS and the deletion of dynamic data.

7.2 Migration Weekend activities

Migration Weekend activities for the CBs begin 19:15 CET on Friday, 03/02/2023 with the confirmation that TARGET2/TIPS General Ledger files and account statements have been processed and verified by CB Settlement Managers. This checkpoint marks the start of the Migration Weekend Dress Rehearsal.

T2Ps may not perform any activities before 13:25 CET, 04/02/2023, and when CBs have given the green light to start reconciliation and liquidity distribution activities. Up until this point, access to CLM and RTGS is reduced while CRDM is available. This timing can be changed in the course of the day if there are changes in timings preceding this checkpoint. In such case, the T2Ps will be informed by their CB.

T2P activities will stop at 17:30 CET Saturday, 04/02/2023 after which the Central Banks will confirm the end of the Migration Weekend and give the green light to start T2S NTS followed by a maintenance window. The schedule for the business day 06/02/2023 can be consulted in the Business Day Management Module.

7.3 Post-Migration

Post-Migration activities are included in the table to provide an overview of activities and events CBs and T2Ps should be aware of. For instance, the RTS II phase for settlement of interbank and customer payments starts already Sunday 05/02/2023 at 08:00 CET for T2Ps that wish to already at this point instruct payments to validate their configuration.

7.4 Activity table

The table below provides a full overview of activities and their timings of the Pre-Migration, Migration and Post-Migration activities. Please note, the Migration Weekend activities are planned timings, i.e. they may change in case of complications or delays in the completion of dependent activities. Any delays impacting the green light to T2Ps will be communicated by the Central Banks to their respective communities.

Weekday	UTEST rehearsal date	Planned timing (CET)	T2 Business day (BDM)	Activity	Simulated Production day (calendar date)
Pre-Migration Validation					
Wednesday	01/02	15:00	01/02	Cut-off for CRDM changes	09/03
Wednesday	01/02	15:15	01/02	Start of EOD 01/02	09/03
Wednesday	01/02	16:15	01/02	Closing of A2A and U2A channel for CLM/RTGS	N/A
Wednesday	01/02	16:25	N/A	Deletion of T2-UTEST dynamic data	N/A
Thursday	02/02	07:00 – 08:00	03/02	Data propagation and CRDM loading to CLM/RTGS	10/03
Thursday	02/02	09:10	03/02	RTGS directory delivered	10/03
Thursday	02/02	12:00 – 18:00	03/02	12:00 – 12:30 opening of Inbound A2A RTGS channel 12:30 – 16:30: **Pre-Migration validation tests (validation through warehoused payments) and reporting to CBs (for A2A RTGS Users).** 16:30 – 17:00 closing of inbound A2A RTGS channel 17:00 – 18:00: T2 Operator assessment of the reported issues and preparation for the necessary LLI 17:00 – 18:00: LLI by the T2 Operator	11/3, 13/3, 14/3
Friday	03/02	07:00 – 13:00	03/02	07:00 – 08:00 LLI by the T2 Operator	11/3, 13/3, 14/3

				08:00 – 08:30 opening of inbound A2A RTGS channel	
				08:30 – 12:30: **Pre-Migration validation re-tests** (validation through warehoused payments) and reporting to CBs.	
				12:30 – 13:00 closing of inbound A2A RTGS channel	
Friday	03/02	18:40	03/02	Last TARGET2-CUST/TIPS GL file and account statements	17/03
Migration Weekend					
Friday	03/02	19:15	03/02	Start of Migration weekend	17/03
Friday	03/02	19:15	03/02	Start of CB and T2 Operator Migration activities	17/03
Saturday	04/02	04:15 – 04:30	06/02	CLM & RTGS Start of Business Day 06/02	18/03
Saturday	04/02	10:00 – 10:30	06/02	Processing of CLM Standing Orders (CESO and RRTI)	18/03
Saturday	04/02	11:40 – 11:55	06/02	Processing of RTGS Standing Orders (RESO)	18/03
Saturday	04/02	13:15	06/02	End of CB operations and reconciliation activities	18/03
Saturday	04/02	13:25	06/02	CBs Green light to T2P activities	18/03
Saturday	**04/02**	**13:25 – 17:30**	06/02	**Start of T2P activities (described in section 8)**	**18/03**
Saturday	**04/02**	**17:30**	06/02	**End of Migration Weekend Dress Rehearsal**	**18/03**
Post-Migration					
Saturday	04/02	17:40	06/02	Start of T2S NTS	18/03
Saturday	04/02 – 05/02	21:00 – 08:00	06/02	Maintenance Window	18/03
Sunday	05/02	08:00	06/02	Start of RTGS RTS II and Settlement Window for Interbank and Customer Payments. This includes Settlement for AS. The cut-off for RTS II is Monday 20/03 15:30 (ref. T2-T2S synchronised standard day schedule)	19/03
Sunday	05/02	10:00 – 12:00	06/02	Operator intervention for payments blocked by incorrect DN or PTA. Note the system and channels are closed in this period.	19/03
Monday	06/02	15:15	06/02	Cut-off for RTGS customer payments	20/03
Monday	06/02	15:30	06/02	Cut-off for CLM customer and interbank payments	20/03

Monday	06/02	19:00	07/02	The minimum reserve calculation is performed at EoD 06/02, therefore the running average will be displayed on Monday 06/02 19:00.	20/03

7.5 Business Day Schedule

In order to ensure that all migration specific checks can be conducted and to control the business day phases during the Migration Weekend, a dedicated business day schedule for the Migration Weekend (go-live business day Monday) is to be created and put in place. This schedule for the go-live day represents the same events and their order as any other business day but it will contain additional STOP events, which allow to control the execution of business day events even after passing the scheduled run time of this event.

The possibility to process intra- and inter-service liquidity transfer orders for the first time follow the standard schedule – there are no settlement windows prior to the opening events.

The following table provides an overview as of when cash transfers, queries and tasks can be submitted to the RTGS component[2].

Code	Phase of the business day	A2A interaction	Status	Planned timing
RT01	Load RTGS business day	Inbound messages received	parked at "technical" level	Saturday 04:00
RSOD	Change of business day	Unknown messages or messages with invalid schema	rejected (admi.007)	Saturday 04:15
		Payment orders	Parked	
		Liquidity transfers	parked & flagged for rejection	
		AS transfers	Parked	
		Queries	processed	
		Tasks	Parked	
RRTI	Start of RTGS RTS I	Unknown messages or messages with invalid schema	rejected (admi.007)	Saturday 10:00
		Payment orders with current business date	Parked	
		Liquidity transfers	Parked	
		AS transfers settlement procedure A, B and E	processed	
		AS transfers settlement procedure C and D	Parked	
		Queries	processed	

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[2] Owing to the fact that payment banks cannot send payment orders in CLM and want to check the proper A2A connection in RTGS, the table focusses on RTGS.

		Tasks	processed	
RESO	Execution of standing orders in RTGS	Unknown messages or messages with invalid schema	rejected (admi.007)	Saturday 11:40
		Payment orders with current business date	Parked	
		Liquidity transfers	processed	
		AS transfers	processed	
		Queries	processed	
		Tasks	processed	
RRII	Start of RTGS RTS II	Unknown messages or messages with invalid schema	rejected (admi.007)	Sunday 08:00
		Payment orders with current business date	Parked	
		Liquidity transfers	processed	
		AS transfers	processed	
		Queries	processed	
		Tasks	processed	
RSIC	Start of settlement window for interbank and customer payments	Unknown messages or messages with invalid schema	rejected (admi.007)	Sunday 08:00
		Payment orders with current business date	processed	
		Liquidity transfers	processed	
		AS transfers	processed	
		Queries	processed	
		Tasks	processed	

Once the Migration Weekend activities are completed and the RRII event has started (Sunday 08:00) the business day will follow the T2-T2S synchronised standard day[3] schedule.

8 Migration Weekend Activities

Following the initial migration activities performed by the T2 Operator and CBs, the CBs will give their communities the green light to start their activities. With the green light, T2Ps can login to T2 and begin

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[3] T2-T2S synchronised standard day schedule is available in the testing conditions document:
https://www.ecb.europa.eu/paym/target/consolidation/profuse/shared/pdf/ecb.ctc.en.pdf

their planned activities e.g. reconcile the balances, reconcile any standing orders (SO) and initiate liquidity transfers (LT) in CLM and RTGS.

The activity tables below describe the activities. Further details are available in the [CLM and RTGS User Detailed Functional Descriptions and User Handbook.](#)

8.1 Start of the Migration Weekend

ID	T2.MW.T2P.ESMIG
Activity Name	T2Ps adapt internal systems to ESMIG
Activity Group	T2 participant activity
Actor	T2 participant user
Data configuration (A2A, U2A, DMT)	N/A
Description	The T2 participant users will initiate the internal adaptions of systems which are required for their communication with CLM and RTGS through ESMIG in A2A. A non-exhaustive list of these systems includes: Collateral and operations management systems Treasury management applications Accounting systems XML mediator applications SWIFT connectors

8.2 Migration of Balances completed and CBs Green Light to begin T2P activities

ID	T2.MW.T2P.BAL.REC
Activity Name	T2P balance reconciliation (conditional)
Actor	T2 participant user
Channel	A2A, U2A
Description	Once the green light has been given by the respective Central Bank, T2 Participants reconcile the balances of its respective MCA, which should reflect the closing balance of the last TARGET2-CUST business day and possible marginal lending/overnight deposit established in TARGET2- CUST at end-of-day on Friday, 03/02/2023. This balance may also be affected by Standing Orders that the participant may have set up within the pre-migration phase and that have been settled at this point. An additional (and conditional) specific activity for the reconciliation of the Standing Orders (T2.MW.T2P.SO.REC) will run in parallel.

	In case incorrect balance is identified, the T2 Participant shall report the issue to the National Service Desk in order to identify the root cause and to remedy the error.

ID	T2.MW.T2P.SO.REC
Activity Name	T2P standing orders reconciliation (conditional and optional)
Actor	T2 participant user
Channel	A2A, U2A
Description	The T2 participant user will verify that the standing orders (captured during Pre-Migration) have been successfully executed. If the standing orders have been successfully executed, then, the T2 participant user will verify that the debit account has been correctly debited and the credit account has been correctly credited (where applicable).
	This activity is conditional and optional, i.e. only required if the T2 participant has standing orders.
	If an incorrect balance is identified or the standing order was not executed or settled correctly, the T2 participant should verify that the standing order was correctly configured in CRDM T2-UTEST. If it was correctly configured the T2P should contact its National Service Desk to investigate the issue.

ID	T2.MW.T2P.LT
Activity Name	T2P liquidity transfers (optional and conditional)
Actor	T2 participant user
Channel	A2A, U2A
Description	T2 participant users can initiate immediate liquidity transfers from their CLM or RTGS accounts (RTGS Account Holders only) .
	Note: Intra-service liquidity transfers between two RTGS DCAs can only take place between accounts belonging to the same Liquidity Transfer Group.
	Note: Attempts to initiate LT before the green light is given by the Central Banks may result in the rejection or queueing of LTs dependent on the time of the migration.